

REMARKS

Reconsideration of the above-identified patent application in view of the remarks following is respectfully requested.

Claims 1-16 are in this case. Claims 1-16 have been rejected under § 102(b).

The claims before the Examiner are directed toward a method of providing feedback to an operator of a device that has feedback delay, and toward a feedback system, that includes a device with a camera and a control arrangement for issuing a movement command to cause the device to move from a first position to a second position, and that uses the method. With the device at the first position, a first image of a view from the device is displayed on at least a portion of a display. Before the operator receives real feedback of the movement command, a view from the device at the second position is predicted. As part of the prediction, a processor translates, rotates, magnifies or reduces the first image. The second image replaces the first image.

§ 102(b) Rejections – Rahim ‘683

The Examiner has rejected claims 1-16 under § 102(b) as being anticipated by Rahim, US Patent No. 5,155,683 (henceforth, “Rahim ‘683”). The Examiner’s rejection is respectfully traversed.

Rahim ‘683 teaches a method of remotely controlling the movement of a vehicle. On a display screen 14 on which is displayed an image acquired by a camera 30 on the vehicle at the vehicle’s present position, an operator draws a path line 12 of a projected path of the vehicle. The operator’s computer 16 maps path line 12 into a corresponding ground path, including waypoints 20 to which the vehicle should move

in succession, and transmits waypoints **20** to the vehicle. The vehicle moves to waypoints **20** in succession.

Both in the rejection of independent claims 1 and 11 and in the Response to Arguments on page 8 of the instant Office Action, the Examiner appears to be identifying path line **12** with the “second image” recited in claim 1 step (d) sub-step (i) and in claim 11 element (c) sub-element (ii)(A). (In the rejection of claim 10, the Examiner appears to identify the entire image on display screen **14**, including path line **12**, with the “second image”. This misidentification is discussed below.) That this identification is in error can be appreciated by considering that both claim 1 and claim 11 recite “predicting a second image of a view from said device at said second position” (emphasis added). Path line **12** is not an image of a view of anything. Path line **12** is a line drawn on display screen **14** by the operator. Furthermore, path line **12** is not “predicted”. Path line **12** is a mechanism by which the operator *instructs* the vehicle to move. Path line **12** is as much a “prediction” of the future movement of the vehicle as a forecast by Arnold Rothstein that Cincinnati would win the 1919 World Series would have been a “prediction” that Cincinnati would win the Series. (Arnold Rothstein bribed selected Chicago White Sox players to lose the Series.)

In addition, the Examiner has misidentified adjustment of the transform that maps path line **12** into the corresponding ground path with the modification of the first image by translation, rotation, magnification or reduction to predict the second image, as recited in claim 1 step (d) sub-step (i) and in claim 11 element (c) sub-element (ii)(A). The Examiner has been misled by Rahim ‘683 lines 15-18:

The transform and parameters depend on the camera orientation and lens. The transform parameters can be continuously adjusted if the camera zooms, pans or tilts.

This citation from Rahim '683 is a summary of what Rahim '683 teaches in column 11 lines 46-55:

In some cases the camera **30** should have the ability to tilt, pan and zoom in response to operator commands. It may also be necessary to move the camera **30** from place to place on the vehicle V, or extend it on a boom. If this capability exists, the parameters of the coordinate transforms from the line **12** to the ground waypoints **20** will change as the camera moves and changes its focal length. These changes must be reported to the station computer for generating the screen path and the waypoints.

In other words, path line **12** is modified to reflect changes in the image as seen by camera **30** with the vehicle *still at its first position*, not at its second position. By contrast, the translation, rotation, magnification or reduction recited in claim 1 step (d) sub-step (i) and in claim 11 element (c) sub-element (ii)(A) is for the purpose of predicting an image of a view from the device at the *second* position.

In addition, if path line **12** is (mis)identified with the “second image”, then the Examiner’s identification of the replacement of an old frame by a new frame (“few” frame is an obvious typo), as taught in Rahim ‘683 column 5 lines 19-22, with the replacing of the first image by the second image, as recited in claim 1 step (d) sub-step (ii) and in claim 11 element (c) sub-element (ii)(B), also is erroneous. Path line **12** does not replace the image on which it is drawn. The image remains on display screen **14** as a background for path line **12**.

Thus, the present invention, as recited in independent claims 1 and 11, is not anticipated by Rahim'683. Furthermore, the present invention, as recited in independent claims 1 and 11, is not even obvious from Rahim ‘683. There is neither a hint nor a suggestion in Rahim ‘683 of predicting what an image of a view from the vehicle will be when the vehicle reaches a new position.

With independent claims 1 and 11 allowable in their present form it follows that claims 2-10 and 12-16 that depend therefrom also are allowable.

Although claims 3-6, 13 and 14 are allowable merely by virtue of depending from claims 1 and 11, Applicant respectfully takes the liberty of pointing out an additional reason why these claims are allowable. In rejecting these claims, the Examiner has identified the grid that Rahim '683 uses to map path line 12 into the ground path with the "filler section" recited in claims 3-6, 13 and 14. That this identification is erroneous can be appreciated by considering that the grid is not visible on display screen 14. See e.g. Rahim '683 column 7 lines 21-23:

This grid is not a physical image seen by the operator O, but is rather a mathematical projection to explain the transform. (emphasis added)

Although claim 10 is allowable merely by virtue of depending from claim 1, Applicant respectfully takes the liberty of pointing out an additional reason why claim 10 is allowable. In rejecting claim 10, the Examiner appears to have identified the "second image" recited in this claim with the image on display screen 14 after the operator has drawn path line 12 on display screen 14. That this identification is erroneous can be appreciated by considering that after the operator has drawn path line 12 on display screen 14, the rest of the image on display screen 14 is still the image as acquired by camera 30 with the vehicle still in its *first* position. By contrast, the "second image" recited in claim 10 is, as recited in claim 1, an image of a view from the device at the *second* position, not at the first position.

In view of the above remarks it is respectfully submitted that independent claims 1 and 11, and hence dependent claims 2-10 and 12-16 are in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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